<u>AMENDMENTS TO THE CLAIMS</u>

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-19.   (cancelled)

20. (currently amended)   A computer implemented method for calculating interests for entrustments of money (K) comprising the following steps:

- loading a number representing quantities of money K into a memory ~~block~~ of a computer system, wherein money K indicates possible amounts of credit granted;

- loading a number representing an additional remuneration M into [[a]] <u>said</u> memory ~~block~~ of said computer system, wherein said additional remuneration M indicates the requirements of the lender for granting the loan;

- processing, by means of said computer system, an additional amount of money L indicative of the risk of loss borne by the lender;

- performing a mathematical combination of the aforementioned quantity of money K, extra yield M and amount of money L, <u>and eventual taxes to be calculated λ,</u> by using said computer system, wherein the combination is performed according to a given formula, in order to obtain a <u>function $B(K,M,L,\lambda)$ representative of a</u> quantity of money [[B]] that, asked of the borrower, allows the lender to obtain an average return of (K+M), ~~and~~

<u>said function $B(K,M,L,\lambda)$ being defined as follows:</u>

$$B(K,M,L,\lambda) = \alpha K + L(1-\lambda) + M(1-\lambda)$$

<u>wherein α represents the percentage of capital reimbursed in the time period considered,</u>

- determining by means of said computer system an interest for entrustment of said quantities of money K as a function of said quantities of money K, additional remuneration M and additional amount of money L,

said processor determining said additional amount of money L through an implicit equation[[.]]

<u>- processing said quantity of money K, said taxes λ, and said function B according to a trim function $T(x;b,K,B,y)$ weighted with a probability density function $(f(x))$ of a cash flow of the borrower,</u>

<u>said trim function $T(x;b,K,B,y)$ having four intervals: less than the minimum recoupment of money b, equal to or greater than b and less than K, equal to or greater than K and less than B, equal to or greater than B,</u>

<u>wherein said trim function $T(x;b,K,B,y)$ gives the following results:</u>

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• if x is less than b, the result is b

• if x is equal to or greater than b and less than K, the result is x

• if x is equal to or greater than K and less than B, K is subtracted from x, and the result is multiplied by (one minus lambda), and K is added to the result

• if x is equal to or greater than B, K is subtracted from B, the result is multiplied by (1- λ), and K is added to the result,

wherein said trim function $T(x;b,K,B,\gamma)$ is defined as follows:

$$T(x;b,K,B,\gamma) = \begin{cases} b & x < b \\ x & b \leq x < K \\ K + (x-K)(1-\gamma) & K \leq x < B \\ K + (B-K)(1-\gamma) & B \leq x \end{cases}$$

21. (previously presented) Method according to claim 20, wherein the aforementioned combination carried out by said computer system is an addition of the quantity of money K with extra yield M and amount of money L.

22. (previously presented) Method according to claim 21, wherein said computer system carries out a multiplication of extra yield M and amount of money L by a term (1-λ) representing the eventual applicable taxes, before carrying out said addition.

23. (cancelled)

24. (currently amended) Method according to claim [[23]] 20, wherein the probability density function (f(x)) is a continuous function, and the weighting is done with an integral through an integral equation.

25. (currently amended) Method according to claim [[23]] 20, wherein the probability density function (f(x)) is a discrete function, and the weighting is done with a summation.

26. (currently amended) Method according to claim [[23]] 20, wherein said computer system, through said trim function T(x;b,K,B,γ), performs a comparison between the cash flow (X) generated by the borrower with threshold values.

27-28. (cancelled)

29. (currently amended) Method according to claim [[23]] 20, wherein said additional amount of money L, is made explicit by said computer system through an analytical solution.

30. (currently amended) Method according to claim [[23]] 20, wherein said additional amount of money L, is made explicit by said computer system through numerical methods or with the aid of error functions.

31. (previously presented) Method according to claim 20, wherein the extra yield M and additional amount of money L are expressed by said computer system as a percentage of K, respectively extra interest rate i_M = M / K and additional interest rate i_L = L /K.

32. (previously presented) Method according to claim 31, wherein said computer system determines said extra interest rate i_M by performing the sum of risk-free rate i_F plus a mark-up i_M^* for the lender for accepting the increased variability of its future revenues.

33. (currently amended) Method according to claim [[23]] 20, wherein the procedure has further comprising a reiteration step for significative values of the input reiteration variables, including the amount of money K.

34. (currently amended) Method according to claim 33, wherein the output of the reiteration step is stored in a vector or list in [[a]] said memory block of said computer system, or plotted by said computer system on a graph that represents the total amount of money B(K,M,L,0) for any significant value of the reiterative variables.

35. (currently amended)   A system for calculating interests for entrustments of money comprising:
- a first Memory Block adapted configured to store data from the user,
- a Reiteration Block adapted to repeat the procedure with all the combinations of values that are of interest to the operator;
- a Processing Processor Block adapted configured to process quantity of money K, extra yield M, additional amount of money L, and eventual taxes to be calculated λ, into a function

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B(K,M,L,λ) set by the user and representative of a quantity of money that, asked of the borrower, allows the lender to obtain an average return of (K+M),

said function *B(K,M,L,λ)* being defined as follows:

$$B(K,M,L,\lambda) = \alpha K + L(1-\lambda) + M(1-\lambda)$$

wherein α represents the percentage of capital reimbursed in the time period considered,

said ~~Processing Block determining~~ Processor being configured to determine an interest for entrustment of said quantity of money K as a function of said quantity of money K, extra yield M and additional amount of money L,

said Processor being configured to process said quantity of money K, said taxes λ, and said function B according to a trim function *T(x;b,K,B,γ)* weighted with a probability density function *(f(x))* of a cash flow of the borrower,

said trim function *T(x;b,K,B,γ)* having four intervals: less than the minimum recoupment of money b, equal to or greater than b and less than K, equal to or greater than K and less than B, equal to or greater than B,

wherein said trim function *T(x;b,K,B,γ)* gives the following results:

• if x is less than b, the result is b

• if x is equal to or greater than b and less than K, the result is x

• if x is equal to or greater than K and less than B, K is subtracted from x, and the result is multiplied by (one minus lambda), and K is added to the result

• if x is equal to or greater than B, K is subtracted from B, the result is multiplied by (1- λ), and K is added to the result,

wherein said trim function *T(x;b,K,B,γ)* is defined as follows:

$$T(x;b,K,B,\gamma) = \begin{cases} b & x < b \\ x & b \le x < K \\ K + (x-K)(1-\gamma) & K \le x < B \\ K + (B-K)(1-\gamma) & B \le x \end{cases}$$

said Processor being configured ~~an Equation-solving Block adapted~~ to find the dependant variable sought, by making it analytically explicit, or with the aid of numerical methods, said ~~Equation-solving block determining~~ Processor being configured to determine said additional amount of money L by solving an implicit equation, and

- a ~~Result-storing Procedure Block~~ second Memory configured to store a result provided by said processor.

36. (currently amended) System according to claim 35, wherein said Memory ~~Block~~ comprises: a ~~block of~~ memory <u>register configured</u> to store quantities of money K, a ~~block of~~ memory <u>register configured</u> to store extra yield M, a ~~block of~~ memory <u>register configured</u> to store an additional amount of money L, a ~~block of~~ memory <u>register configured</u> to store the minimum recoupment of money b, a ~~block of~~ memory <u>register configured</u> to store a distribution function *(f(x))*, ~~a Working Memory block of the Reiteration Block, a block of memory to store the results of the process,~~ a ~~block of~~ memory <u>register configured</u> to store the function B, a ~~block of~~ memory <u>register configured</u> to store percentage of capital lent to be reimbursed *α* and applicable taxes γ.

37. (currently amended) A computer readable medium storing a computer program which when executed by a computer causes the computer to perform the following steps:

- loading a number representing quantities of money K into a memory ~~block~~ of a computer system, wherein money K indicates possible amounts of credit granted;

- loading a number representing an additional remuneration M into [[a]] <u>said</u> memory ~~block~~ of said computer system, wherein said additional remuneration M indicates the requirements of the lender for granting the loan;

- processing, by means of said computer system, an additional amount of money L indicative of the risk of loss borne by the lender;

- performing a mathematical combination of the aforementioned quantity of money K, extra yield M and amount of money L, <u>and eventual taxes to be calculated *λ*,</u> by using said computer system, wherein the combination is performed according to a given formula, in order to obtain a <u>function *B(K,M,L,λ)* representative of a</u> quantity of money [[B]] that, asked of the borrower, allows the lender to obtain an average return of (K+M),
<u>said function *B(K,M,L,λ)* being defined as follows:</u>

$$B(K,M,L,\lambda) = \alpha K + L(1-\lambda) + M(1-\lambda)$$

<u>wherein *α* represents the percentage of capital reimbursed in the time period considered,</u> ~~and~~
- determining by means of said computer system an interest for entrustment of said quantities of money K as a function of said quantities of money K, additional remuneration M and additional amount of money L,
said processor determining said additional amount of money L through an implicit equation[[.]]
<u>- processing said quantity of money K, said taxes *λ*, and said function B according to a trim function *T(x;b,K,B,γ)* weighted with a probability density function *(f(x))* of a cash flow of the borrower,</u>

said trim function _T(x;b,K,B,y)_ having four intervals: less than the minimum recoupment of money b, equal to or greater than b and less than K, equal to or greater than K and less than B, equal to or greater than B,

wherein said trim function _T(x;b,K,B,y)_ gives the following results:

• if x is less than b, the result is b

• if x is equal to or greater than b and less than K, the result is x

• if x is equal to or greater than K and less than B, K is subtracted from x, and the result is multiplied by (one minus lambda), and K is added to the result

• if x is equal to or greater than B, K is subtracted from B, the result is multiplied by (1- λ), and K is added to the result

wherein said trim function _T(x;b,K,B,y)_ is defined as follows:

$$T(x;b,K,B,\gamma) = \begin{cases} b & x < b \\ x & b \le x < K \\ K+(x-K)(1-\gamma) & K \le x < B \\ K+(B-K)(1-\gamma) & B \le x \end{cases}$$

38-39. (cancelled)

40. (new) A system for calculating interests for entrustments of money comprising:

- a first Memory configured to store data from the user,

- a Processor configured to process quantity of money K, extra yield M, additional amount of money L, and eventual taxes to be calculated λ, into a function B(K,M,L,λ) set by the user and representative of a quantity of money that, asked of the borrower, allows the lender to obtain an average return of (K+M),

said function B(K,M,L,λ) being defined as follows:

$$B(K,M,L,\lambda) = \alpha K + L(1-\lambda) + M(1-\lambda)$$

wherein α represents the percentage of capital reimbursed in the time period considered,

said Processor being configured to determine an interest for entrustment of said quantity of money K as a function of said quantity of money K, extra yield M and additional amount of money L,

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said Processor being configured to process said quantity of money K, said taxes λ, and said function B according to a trim function $T(x;b,K,B,\gamma)$ weighted with a probability density function $(f(x))$ of a cash flow of the borrower,

said trim function $T(x;b,K,B,\gamma)$ having four intervals: less than the minimum recoupment of money b, equal to or greater than b and less than K, equal to or greater than K and less than B, equal to or greater than B,

wherein said trim function $T(x;b,K,B,\gamma)$ gives the following results:

• if x is less than b, the result is b

• if x is equal to or greater than b and less than K, the result is x

• if x is equal to or greater than K and less than B, K is subtracted from x, and the result is multiplied by (one minus lambda), and K is added to the result

• if x is equal to or greater than B, K is subtracted from B, the result is multiplied by (1- λ), and K is added to the result,

wherein said trim function $T(x;b,K,B,\gamma)$ is defined as follows:

$$T(x;b,K,B,\gamma) = \begin{cases} b & x < b \\ x & b \leq x < K \\ K+(x-K)(1-\gamma) & K \leq x < B \\ K+(B-K)(1-\gamma) & B \leq x \end{cases}$$

said Processor being configured to find the dependant variable sought, by making it analytically explicit, or with the aid of numerical methods, said Processor being configured to determine said additional amount of money L by solving an implicit equation,

said Processor being configured to repeat the procedure with all the combinations of values that are of interest to the operator, and

- a second Memory configured to store a result provided by said processor.